

NATIONAL EMERGENCY SERVICES ACADEMY, CIVIL AIR PATROL
MISSION AIRCREW SCHOOL
OBSERVER/MISSION PILOT TRAINING FLIGHT #5 ELT
INSTRUCTOR
B Flight / Area B

A. PRE-FLIGHT BRIEFING

NOTE: The best training setting for ELT training is to have an observer trainee in the front right seat and a scanner trainee in the back seat. The scanner trainee should use the Scanner Training Flight #4 syllabus.

1. Sign in personnel, aircraft, and vehicles. Use mission flow chart [Pilot: Ensure that the beacon is on and that you know where it is located.]
2. Have the trainee discuss the observer's duties during:
 - a. Preflight and taxi
 - b. Departure
 - c. En route
 - d. ELT search.
 - e. Approach and landing
3. Discuss electronic search patterns (may refer to CAPP 2), including:
 - a. Altitude selection.
 - b. SARSAT information, including how to transfer the data to a sectional.
 - c. Basic operation of the DF, including signal strength and DF meters.
 - d. Signal null (wing block) method, using both the DF and COMM receivers.
4. Discuss use of the GPS, VOR, and DME during an ELT search.
5. Have the trainee transfer two SARSAT hits onto the sectional. Discuss how the search will be accomplished (use 2000' AGL).
6. Initiate a 104.
7. Show the trainee the DF equipment in the aircraft, including location of the DF and COMM antennas.
8. Show the trainee where CAPP 2 is located in the aircraft.
9. Ensure that the trainee has a St. Louis sectional, a clipboard with blank paper, and an aeronautical protractor.

**NATIONAL EMERGENCY SERVICES ACADEMY, CIVIL AIR PATROL
MISSION AIRCREW SCHOOL
OBSERVER/MISSION PILOT TRAINING FLIGHT #5 ELT
INSTRUCTOR
B Flight / Area B**

B. PREFLIGHT AND TAXI

1. Have the trainee set up the proper communications frequencies for the CAP radio, DF, ATIS, clearance delivery/ground, tower, and departure control. Demonstrate setup of the audio panel. Then have the trainee:
 - a. Set up the audio panel switches.
 - b. Obtain ATIS information.
 - c. Handle communications with clearance delivery/ground, tower, and departure control.
 - d. Give wheels up, time in the grid, time out of the grid, and wheels down reports.

C. PROCEED TOWARD THE BEACON

During the flight, the trainee should concentrate on learning to use the aircraft DF equipment. Secondly, the trainee should use the aircraft navigational aids to support the electronic search. The trainee should also handle as much of the communications load as practical during this exercise, but this is of least importance (however, the trainee should report wheels up, time in the grid, time out of the grid, and wheels down).

Proceed to Greensburg-Decatur Co. at cruise speed. Climb to 2000' AGL and begin the search as soon as practical. The trainee should track the route on the sectional and be prepared to use the VORs and GPS to locate a position.

1. Conduct a normal electronic search pattern, keeping the trainee informed as to your actions. Discuss the observer's role in the search.
2. Give the trainee another position and heading to simulate a report from another aircraft involved in the search. Have the trainee determine current position and the heading to the beacon from this position. The trainee will then extend the headings on the sectional until they cross. Discuss this method of determining the possible location of an ELT.
3. Demonstrate the signal null (wing block) method. Coordinate with the observer trainee to determine headings to the beacon. The trainee should note the positions and headings on the sectional or on a sketch. Discuss this method of determining the possible location of an ELT.
4. Point out where the beacon is located. Have the trainee fix its position on the sectional and draw a sketch of the area.

**NATIONAL EMERGENCY SERVICES ACADEMY, CIVIL AIR PATROL
MISSION AIRCREW SCHOOL
OBSERVER/MISSION PILOT TRAINING FLIGHT #5 ELT
INSTRUCTOR
B Flight / Area B**

D. RETURN TO BASE

1. Have the trainee determine the proper heading for the return to BAK, and let the trainee set up the navigational instruments as necessary.
2. Have the trainee obtain ATIS information and then contact BAK Approach Control.
3. Have the trainee handle communications with approach, tower, and ground control.

E. DEBRIEFING

1. Answer any questions. Ensure that the trainee thoroughly understands all aspects of electronic searches.
2. Let the trainee provide the information for the debriefing (104).
3. Sign the trainee's qualification card or 101-T.